

The claims

1. Apparatus for enabling a portable electronic memory module to be able to be used to replay audio when the portable electronic memory module is operatively attached to the apparatus, the apparatus including;
 - 5 a port for operatively connecting with an interface connector of the memory module for transfer of audio signals between the memory module and the apparatus, and power from the apparatus to the memory module;
 - 10 a controller for controlling the audio signals, the controller comprising a host controller, an interface controller for controlling the interface, and a buffer memory for receiving the audio signals from the portable electronic memory module;
 - an audio amplifier;
 - 15 a source of power; and
 - a connector for output of audio.
2. Apparatus as claimed in claim 1, wherein the transfer of audio signals is from the memory module to the apparatus and the apparatus to the memory module, but is only one-way at any one time.
- 20 3. Apparatus as claimed in claim 1, further comprising a processor for controlling and supplying data to a display on the apparatus, and for controlling output of audio signals.
- 25 4. Apparatus as claimed in claim 1, wherein the connector is also for the input of audio signals.
5. Apparatus as claimed in claim 1, wherein the connector is also for input of video signals.
- 30 6. Apparatus as claimed in claim 1, further comprising a processor including an image sensor module, and an audio amplifier.
- 35 7. Apparatus as claimed in claim 1, wherein the controller comprises a host controller, a controller for the interface, and a buffer memory for receiving the audio signals from the portable electronic memory module.

8. A method for using an apparatus for playing audio stored in a portable electronic memory module, the method comprising:
- 5 (a) operatively connecting the portable electronic memory module to the apparatus to enable the audio to be transferred to the apparatus;
- (b) reading audio data stored in the portable electronic memory module;
- 10 (c) transferring the audio data into a buffer memory and playing the audio from the buffer memory;
- (d) continuing to transfer the audio data to the buffer memory while continuing to play the audio data from the buffer memory until the buffer memory is full then suspending operation of the portable electronic memory module;
- 15 (e) upon the buffer memory being substantially empty, reactivating the portable electronic memory module and reading audio data from the electronic memory module into the buffer memory until the buffer memory is full;
- (f) repeating steps (d) and (e).
- 20 9. A method as claimed in claim 8, wherein in step (b) the playing of audio from the buffer memory does not commence until a predetermined storage level in the buffer memory is reached.
- 25 10. A method as claimed in claim 8, wherein the audio is decoded and decrypted as it is read.
11. A method as claimed in claim 8, wherein the audio is amplified, and sent to an audio outlet for playing.
- 30 12. A method as claimed in claim 8, wherein, between steps (a) and (b), file information is read from the portable electronic memory module and displayed in a display of the apparatus.
- 35 13. A method as claimed in claim 8, wherein the relatively low level is substantially empty.

14. A method as claimed in claim 11, wherein the relatively low level is greater than the predetermined storage level.